

NELSON'S FIRST SCIENCE READER



Class PE 1127

Book .S3V5

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A SCENE FROM NATURE

...FIRST...

SCIENCE READER

By *L. Laura* L. MAE NELSON *Virden*
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THE UNIVERSITY
OF CHICAGO

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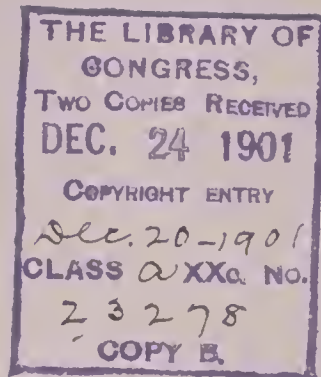
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INTRODUCTION.

HE true teacher appreciates the place the study of Science holds in our public schools. Nature appeals to the impressive and responsive nature of the child. Nothing can better serve to *unify* our Primary work than nature studies. The children in our progressive schools are fed, and well fed too, on much science work, in *script*.

There has been some hesitation in giving this script work, because of the failure to connect the sentences used in science with those found in readers.

There has, therefore, been much demand for a Science Reader. It is purposed that this plan shall not only cover the long-felt need of a simplified Science Reader, but shall be an improvement over the disjointed selections and nonsystematic arrangement of other readers.

Thought getting and thought expression are the aims in teaching reading. Learning to read has long been conceded to be something more than mastering the pronunciation and spelling of *words*.

The lessons in this reader are arranged with reference to the seasons of the year. Such science studies as are apt to be "taken up" in certain seasons, are treated of in connection with that season's stories.

It is hoped that the teacher into whose hands this book may fall, will not consider that the lessons need be given in consecutive order. The lessons are connected, but not so much so as to bar the child from reading the particular lesson he may find connected with the object he is studying.

Hoping that the book will be of much service and pleasure to both the teachers and the children,
I am,

Yours very cordially,

L. MAE NELSON.

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SUPPLEMENTARY SCIENCE READER

SPRING TIME.



I am glad spring is here.

We are tired of the long, cold winter.

I think the flowers are all glad that winter has gone, too.

Kendall, do you think the trees know that spring is here?

The buds, that have been asleep so long, are waking up.

The birds are coming back. They have been away all winter.

The birds and the bright sunshine will wake up the buds.

Will the rain help the buds to open? Oh yes, the rain will help them.

We have some pretty twigs in the schoolroom. I have some twigs at home. We put the twigs in water.

Look at the pussy-willows!

They are ready to tell you something.

What do they say, Mabel?

They seem to say they are glad to see the sunshine.

I think they are glad to see the little birds.

Their houses are getting too small to hold them now.

Their houses are the little brown buds, that are fastened to the stem.

The pussies have lived in their little brown houses all winter.

They are glad to come out now.

Some pussies are pink and some are white.

They soon grow so very large that the little brown houses fall off the twig.

Watch the pussies grow! They get prettier every day.

Soon they will turn to catkins.

The yellow pollen dust will cover their soft fur.

We all like to watch the pussy-willows grow. _____

WHAT DOES APRIL SAY?

April seems to be a sad month.

The rain falls nearly every day.

It is a very cloudy month.

We wish little April would laugh.
It makes us unhappy to see so
much crying.



The pussy-willows look out of their
little brown houses to see what is the
matter.

Do they like the rain?

What does the rain do for them?

What does the rain do for the
seeds?

It helps them very much.

It helps them to open the doors of their little houses.

April is not sad. April is happy in helping the buds and seeds.

BLACKBIRDS.



It is spring time. Did you see the blackbirds? The blackbirds come back to see us in the spring time. They go to their home in the South during our cold winter.

They come back to us in large flocks. You can hear their glad song.

They make their nests in low bushes and among the tufts of grass.

In the fall they get together in large flocks and go down upon the farmer's corn fields. They are very fond of corn.

Do you think the farmers like the blackbirds?

The farmer does not like to have them eat his corn.

They make their nests of grass, small twigs, and fine roots.

What do you think you will find in the nests?

You will find some pale blue eggs, spotted with dark brown.

These birds are very pretty. They are shy and will not let you go very near them.

THE PRETTY RAIN DROPS.



The rain is falling very softly.

I like to watch the rain fall.

It drops down very slowly today.

I do not like to see the rain come down fast.

I do not like to have the wind blow while it rains.

A nice soft rain-fall, like this, makes my plants feel happy.

All my flowers are very thirsty.

Do you know how they drink the water?

The water soaks down into the ground. The roots take it in and send it up through the plants. All their little pipes are full of water.

The soft rain has washed all the dust off the leaves. They look very pretty and green.

The flowers all look very happy.

See them nod their little heads.

They are not sleepy now.

The rain-drops are whispering something to them.

What do you think the rain-drops say?

I think they say, "Wake up, pretty flowers!"

What do you think they say, Maud?

I think they say, "Here is a drink for you."

What do you think the flowers say?
The flowers say, "Thank you, thank
you, rain-drops."
Listen to the rain.

THE BIRDS IN THE RAIN.



The little birds will get wet.
Do you see them out in the rain?
Will their feathers get very wet?
Do they like the rain?
I do not know. Let us watch them.
I hear a bird singing in the rain.

Are birds always happy when they sing?

I do not know. I think they are. They seem to be very happy.

Are you always happy when you sing?

No, I am not always happy when I sing. I like to sing.

I think we ought to try to be as happy as the little birds.

Sing, little bird, sing!

It is a little bluebird.

He does not seem to care for the rain.

I think he is trying to wake the flowers.

The flowers have been asleep all winter.

Where has the bluebird been all winter?

Oh, he has been where it is warmer.

The little bluebird could not live here in the cold winter.

He goes away during our cold winter, and comes back again when our spring comes.

HOME BUILDING.



I see one, two, three little birds.

They have straws in their bills.

What do you think they will do with the straws?

Oh! I know! They are making nests.
Yes, they are building their homes.
They are very happy while they work.
Do you like to watch the birds build their nests?

They sing and work. One of the little birds is building her nest in the elm tree. I am glad we can watch her.

I saw the bird take some thread to the tree. Will she use the thread?

With what do the birds build their nests? We will watch and see.

I think the bird uses fine, dry grasses.

Ann saw a bird take a leaf in its bill and fly off with it.

Fred says he knows the birds use horse hair in weaving their nests.

Did you ever see the birds carry pieces of string in their bills?

What do they do with the string?

The string helps to make their nests strong.

The little birds work hard.

They make their nests strong and soft.

THE WILLOW TWIG.



I have a willow twig.

My twig has two layers of bark.

The outer layer is darker than the inner layer.

The outer layer is smooth and glossy.

The inner layer is tough and fibrous.

The woody part of the twig is inside the bark.

The center of the woody part is soft.

The soft part is called pith.

There are alternate buds on my twig.

The buds are very small.

Between the buds, on the bark, I see little red spots.

Some buds, on the twig, are larger than others.

Where are the largest buds?

Let us open one of the buds and look at it.

See the little leaves! How closely they are put together!

The buds are opening.

The sunshine and rain will soon make the trees look pretty.

I think the first green leaves are very pretty.

We will watch the buds open.

THE SEEDS.



The birds are trying to wake the seeds and the buds.

They think the little buds have been asleep long enough.

They have been asleep all winter.

They will soon open their pretty eyes.

The sun is helping to wake the buds, too.

We will plant some seeds and watch them grow.

What seeds shall we plant?

We will plant some beans, and some morning-glory seeds.

What do you think you will see first?

Will the seed's coat come off? Watch and see.

When the little seed begins to wake up, he finds his coat is too small.

The little coat breaks open.

How does it open? Do you see the coat-button?

What makes the little seed grow larger every day?

What makes you grow larger every day?

The food makes the little seed grow.

What is the seed's food?

The little seed has many things to tell us. Do you know what they are?

Let us watch it every day.

THE LEAF.



I see a leaf.

The leaf is yellow.

The leaf is very pretty.

Some leaves are red and some are yellow.

I saw a pretty brown and yellow oak leaf.

The maple leaves are very pretty.

There are two parts to a leaf.

Most leaves have a stem and a blade.

Some leaves have no stems.

Did you ever see a leaf with no stem?

I have a lilac leaf.

My leaf has a very long stem.

Do you see the stem of my leaf?

Pearl's leaf has a long stem, too.

The elm leaf has a very short stem.

The blade of my leaf is yellow.

This is a pretty blade.

See the pipes running through the leaves!

There is water in these little pipes.

There is a pipe running through the stem to the blade of the leaf.

These pipes are called veins.

Do you see the veins?

There is a large vein in the middle of the leaf.

There are other little veins running into it.

This large vein is called the mid-vein.

Do you see the mid-vein?

We will find the mid-vein in other leaves.

THE BIRD ON THE NEST.



What kind of a bird is this?

We can almost hear him sing.

See the pretty bird near him.

He is singing to the bird on the nest,

The bird on the nest seems to like to hear him sing.

Will the bird that is on the nest sing?

We will watch the birds we see on nests, and see if they sing.

Does this little bird stay on the nest all of the time?

The bird is on the eggs.

Watch some little bird and see if it stays on the eggs all the time.

The birds look very happy?

How does the bird on the nest get its food?

Soon there will be little birds in the nest. The old birds will fly away and get food for the little birds.

Do you like to watch little birds?

Mabel likes to watch them learn to fly.

When the little birds see the pretty
flowers, they will try to sing.

I like to hear the birds sing.

THE OAK LEAF.



The oak leaf is very pretty. It
has a darker green color than most
other leaves.

It is long and narrow.

The edge of the leaf is broken.

I like to draw the oak leaf.

Do you like to draw leaves?

The upper surface of the oak leaf is very glossy.

The oak leaf has a mid-vein.

There are many other veins running into the mid-vein.

If we break the oak leaf from the tree, the leaf will die.

Why will it die?

It will die because it has no more water running through its veins.

We can keep the leaves a little while after we take them from the tree by putting them in water, but they will not live long.

THE MAPLE LEAF.

This is a maple leaf. The maple leaf is very pretty.

It is not so long as the oak leaf.

It is not broad like the geranium leaf.

The edge of the geranium leaf is not so much broken as the edge of the maple leaf.

The maple leaf has a very pretty shape.



The stem is long and is of a light green color.

The leaf blade is two shades of green. It is a light green underneath and a dark green on the upper surface.

The surface of the leaf is very smooth.

The upper surface is glossy.

The leaf has many ribs or veins.

What are they for?

The veins are full of moisture.
Break one of them and see what is in it.

There is one large vein running through the middle of the leaf.

What is this vein called?

THE FROG.



The color of the frog's body is green.

The frog's body is broad and short.

It has two bright eyes.

How many feet has the frog?

It is web-footed.

It moves by swimming and hopping.

People eat frogs' legs.

The frog breathes through its nose.

It swallows the air.

It eats bugs, flies, and worms.

Frogs live in the water most of the time.

Can you make a noise like a frog?

Do you like to hear the frog sing?

The frog does not seem to like the sunshine. It likes the rain.

It is happiest on a rainy, dreary day.

When you are most sleepy and tired, the frog is most happy. It sings all night.

Its voice is loud and shrill. It seems to say, "I'm so glad. It's going to rain. It's going to rain."

FISHING.



This little boy's name is Harry.

Harry is a very good little boy. One day his mamma said he might go to the brook and catch some fish.

Harry has a long fishing-pole and some strong string. He uses the string for his fishing-line.

Do you think he has a fishhook? Yes, I think he has a bright new fishhook. Harry has a tin pail with him. What has he in the pail? I think he has water in the pail. Archie thinks he has worms in the pail.

Yes, he has worms in his pail. What are the worms for? The worms are his bait.

Harry will put some bait on his fish-hook and then let it go down into the water.

What will the fish do when they see the bait? When the fish see the bait they will bite it.

When a fish bites the bait it gets caught on the sharp hook. What will Harry do then? He will pull the fish line out of the water and take the fish off the hook.

When Harry takes the fish off the hook he will put it on a string.

Did you ever go fishing, Clara?

Oh yes, and I had a good time. But I did not catch one fish.

How many fish do you think Harry caught?

BLACKBERRIES.



We are going to pick berries today.

Oh! Are you? Do let me go, too! I have never been out where the berries grow, Frank.

Why, Mary, how strange! We go every year when the berries are ripe.

I will ask mamma if you may go with us. Maybe your mamma would like to go, too. Run quick and ask her, Mary.

Frank thought it very strange that Mary had never picked berries.

Mary has always lived in the city. This is her first visit to the country. She is very happy and wants to see everything. She loves the country very much.

Here she comes back, ready to go. Her mamma said she might go and help pick berries.

You can see them in the picture. Mary is very much pleased with berry picking.

She has her pail nearly full. Do you like to pick berries? What kind of berries do you think they are gathering?

Are they blackberries?

Yes, they are nice, large blackberries?

Do you like berries?

What kind of berries do you like best?

THE PINE TWIGS.



The pine twig has brown bark.

Do you see the pine needles?

Yes, but the pine needles are green.

We all think the needles are very pretty.

Mabel says they are “Fairies’” needles.

Will the needles’ sharp points hurt the Fairies?

THE AUSTRALIAN PINE.



The Australian Pine has two needle-leaves in a sheath.

The needle-leaves are long, sharp and stiff.

They are dark green, and glossy. Each needle-leaf has two faces.

One face is plane, the other is curved.

The plane faces grow facing each other in the sheath.

The sheath is brown and rough.
The sheath holds the leaves together.

THE WHITE PINE.



The White Pine has five needles in a sheath.

The needles are triangular.

They have plane faces.

They are dark green.

They have sharp points.

The bunches of needles look like tassels.

There is a little bud in the middle of each bunch.

The needles are the leaves of the tree.

THE MOUSE.



What can a little mouse do?

A mouse can see. It has two very bright eyes.

A mouse has two sharp ears.

It can hear very well. Its little ears stand up and it can hear the least sound.

A mouse has four feet and a long, cylinder-like body.

A mouse has a keen smell, too.

Its mouth seems very small.

It has teeth like the rat's and the beaver's.

The four front teeth are long and sharp. They are used for gnawing.

A mouse gnaws holes through wood to get what it wants.

Did you ever hear a mouse gnawing wood?

It makes a very strange noise. Sometimes you may hear one gnawing in the night.

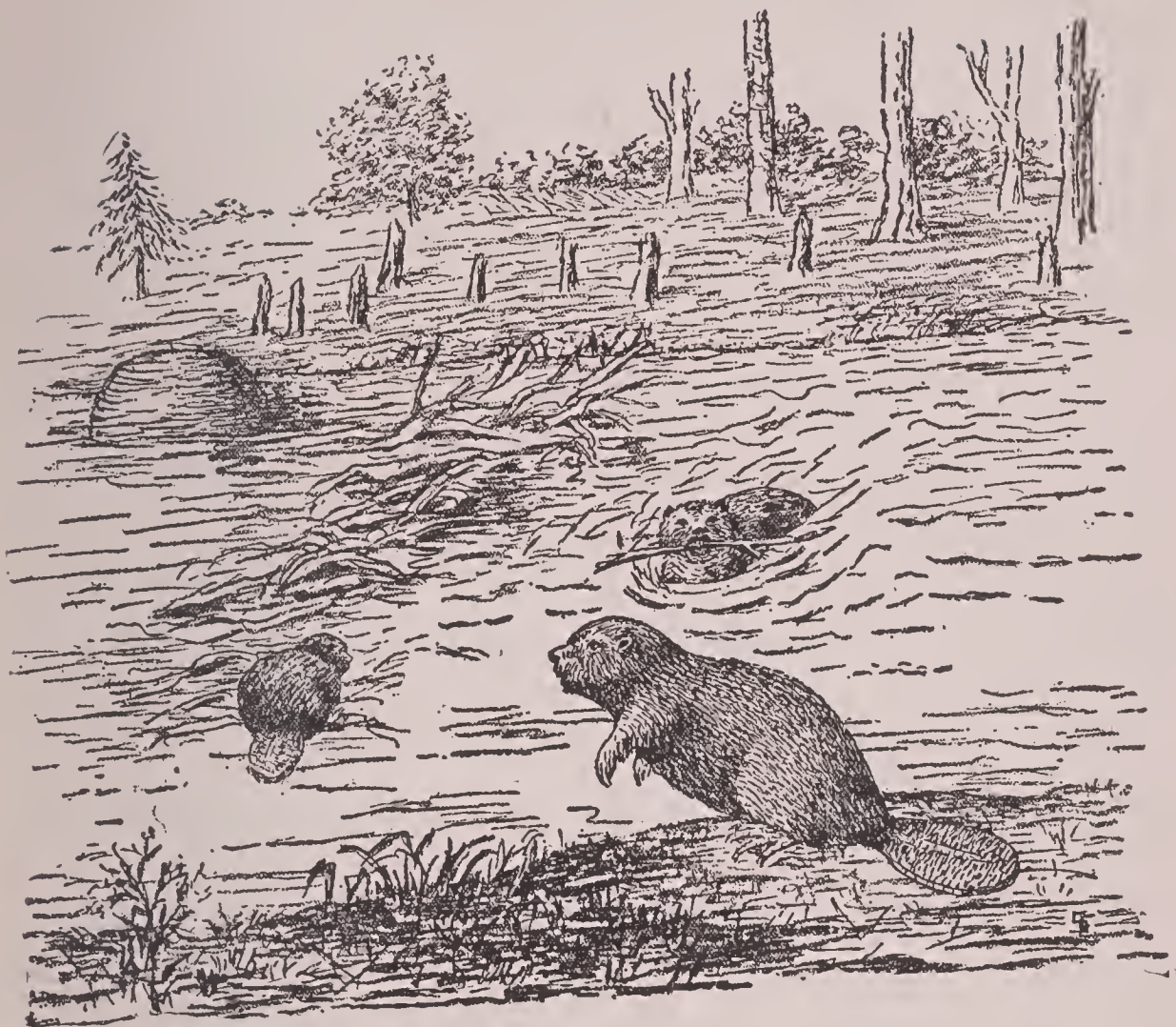
Did you ever see a hole that a mouse had gnawed?

A mouse is called a "Gnawer."

The mouse belongs to the same family as the squirrel, the beaver and the rat.

The mouse is a very knowing little animal.

THE BEAVER.



The beaver is a very timid animal. It is about two or three feet long and one foot high. It is covered with brown hair. Its eyes and ears are small. Its nose is blunt.

The beaver has very strong, sharp

teeth. The teeth are like the teeth of the rat and the squirrel. The four front teeth are very long and sharp. These teeth are called incisors. The back teeth are used for grinding their food.

The beaver has a very queer tail. It is long and flat. It looks like the blade of an oar. The beaver uses his tail as a mason uses his trowel. It looks somewhat like a trowel. There is no hair or fur on it. It is covered with scales.

The beaver has four feet. The hind feet have thin skin between the toes. This shows us that he can swim.

Beavers always build their houses near or in the water. If the water is a stream, they build a dam across it.

The dam is made of stones, branches

of trees, and clay. The beavers build their dams very neatly.

They cut the trees down with their sharp teeth.

When they get the branches of the trees and the stones where they want them, they plaster the dam with clay.

Why do they plaster the dam? They plaster the dam so that the sticks and stones will stay where they place them. The water would wash the dam away if the sticks and stones were not firmly held in place.

The beavers lay the clay on the dam with their broad, flat tails. They smooth the clay over the branches and stones with their tails.

The beavers never live or work alone.

They build many houses near to-

gether. They make a little "Beaver Town."

The houses are built of mud, sticks, and small branches of trees. The houses are several feet high and very thick.

There are two rooms in a beaver's house. One room is under the water. This is their store room. The other room is above the water. The floor of the room above the water is covered with soft moss. This is their living room.

They put their food for the winter in their store room. This food is the bark which they gnaw from the trees.

The beaver is a very busy little animal.

THE RABBIT.



See the pretty rabbits!

They are very white. What are their names?

Fred calls one Bunny and the other Dot.

They are very tame. Fred calls them and they come to him.

They have pretty pink eyes.

They hold their ears straight up, as if they were listening.

They are very fond of clover.

Do you know what rabbits like best?

Yes, they like cabbage leaves best.

The rabbit belongs to the same family as the rat, the beaver and the squirrel.

Do you know what family that is?

It is the family of gnawers.

The gnawers are sometimes called rodents?

What kind of teeth have the rodents?

A rodent must have four sharp front teeth for gnawing.

What did you ever see a rabbit gnaw?

Are the rabbit's fore legs and hind legs the same length?

Can you tell me why?

How does the rabbit move?

THE RAT.



The rat has a long, cylinder-like body.

Its body is covered with coarse hair.

The hair is gray or dark brown.

The rat has a pointed head.

Its nose is sharp.

The rat can smell well.

It has two pointed ears.

Its teeth are like the squirrel's teeth.

The four front teeth are long, sharp and pointed.

They are used for gnawing.

What other animals gnaw?

The four front teeth are called incisors.

The teeth used for grinding the food are called molars.

The molars are very strong.

The rat has four short legs.

There are claws on its feet.

How many toes has a rat?

The rat has a long, scaly tail.

Of what use is the rat's tail?

The rat and the mouse are very much alike.

THE SQUIRREL.

I see a squirrel.

Does he not look pretty?

The squirrel can climb a tree very quickly.

It has long, sharp claws.

The squirrels are very busy now.
They are gathering nuts.
What will they do with the nuts?
They will store them for winter use.
The squirrel is a very wise little
animal.



Can you tell me to what family the
squirrel belongs?

Yes, it belongs to the rodent
family.

They have incisors and molars.

What use do they make of their
incisors?

What use do they make of their molars?

The squirrel has a long, bushy tail.
The squirrel is light brown in color.

THE KITTEN AND THE MOUSE.



See the kitten and the mouse.

The mouse seems to think the kitten will catch it.

Will the kitten catch the mouse?

No, the kitten is not trying to catch it.

The mouse was in a shoe.

It was an old, black shoe. The shoe had a hole in the toe.

When the little mouse heard the kitten, it ran out through the hole in the toe of the shoe.

It is a very pretty kitten. See the ribbon around its neck.

The kitten is standing on its hind paws.

It is looking into the shoe.

The shoe has five buttons on it.

The mouse has four paws.

I see the mouse's four paws and two of the kitten's paws. Four paws and two paws are — paws.

I am glad the kitten did not hurt the mouse. Do you think the mouse will go into the shoe again?

THE ESKIMO.



The Eskimos live in the far North.
It is very cold where they live.

It is so cold there that trees cannot grow.

There is snow on the ground all the time.

We could not live there very well.

The Eskimos do not feel the cold as we do. They are used to it.

The Eskimos could not live here

and dress as we do. It is too warm here for them.

They wear clothing made from the skin of the seal and the bear.

The Eskimos are not very tall.

They have round faces and brown skin.

Their eyes are small. Their noses are broad and almost flat. Their hair is straight and black.

The Eskimo babies are white.

They grow brown as they get older.

The Eskimos are very untidy.

They never wash. They do not know the use of soap.

They eat the meat of the seal and the bear.

They like fat meat.

Their candy is like our tallow.

They eat with their fingers.

When they finish eating they rub their greasy hands on their faces.

They look very stupid.

The Eskimos have no schools.

They live very happily together.

They are very kind to each other.

We will learn more about them.

THE ESKIMO'S IGLOO.



This is the Eskimo's home.

The Eskimo's home is called an igloo.

The igloo is made of snow and ice.
It looks like a beehive.

It has an opening near the ground.
This opening is the door.

The Eskimo crawls into his igloo.

Some igloos have no windows.

There is a shelf of ice inside the igloo.

The Eskimos sleep on this shelf.
It is covered with the skins of the bear
or the seal.

They eat from this shelf, too.

It serves them as bed and table.

The igloos are very small.

THE INDIAN.

The Indians are a copper-colored people.

They are usually large.

They have high cheek bones.

They have long, straight, black hair.



Their eyes are very black, too.

The Indian women are called squaws.

The children are called papooses.

Indians are very fond of hunting.

They are fond of fishing, too.

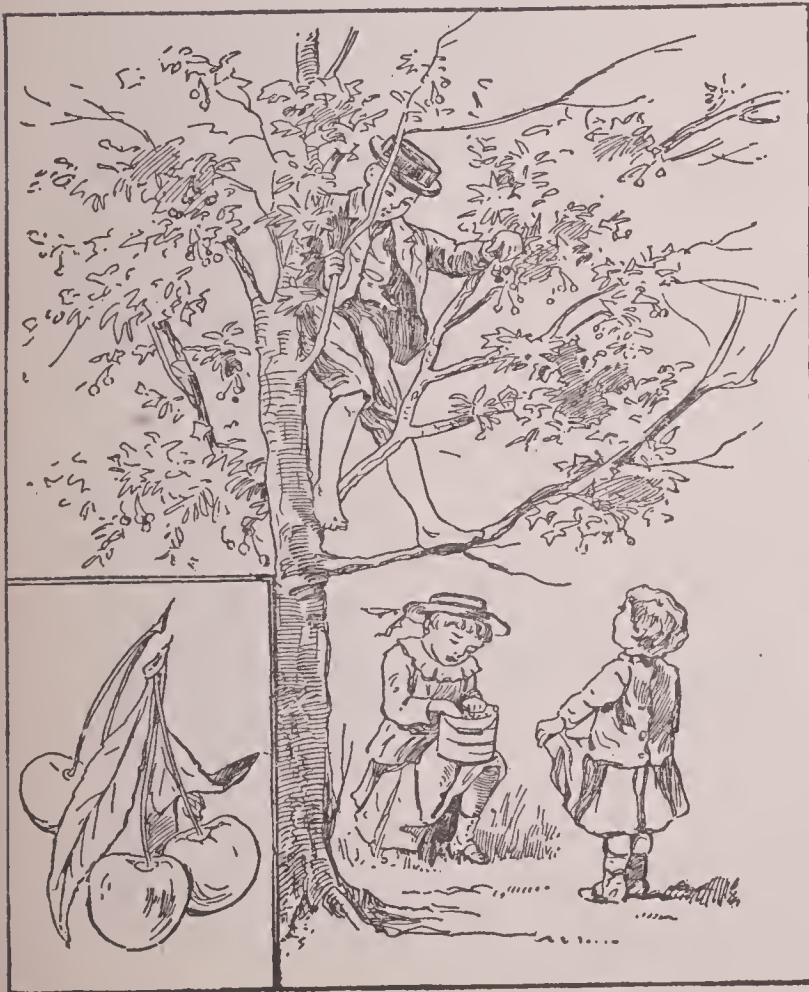
Did you ever see an Indian?

The Indian is kind and good when he is well treated.

Mr. Longfellow wrote a pretty story about the Indian.

Do you know the story of "Hiawatha"?

THE CHERRY.



George is in the tree.

It is a cherry tree. Do you see the cherries? Nat and May are on the ground.

What is Nat doing?

He is eating the cherries he has gathered.

May is waiting for George to drop some cherries down to her.

What do you think she will do when she gets them?

The cherries are very ripe. They are large cherries, too.

Cherries are a very pretty fruit.

The cherry has a long stem. The cherry is almost a sphere. It has a stone in it. We will read more about it sometime.

THE PEACH.

The peach is an ovoid.

The peach has one dimple and one point.

It has a stem.

The peach is red and yellow.

It is covered with a fine, soft fuzz.
The fuzz looks like fine hair.
Is the fuzz good for anything?
Does it keep the peach warm?
The fuzz covers the pretty skin.
The skin is very thin.



The peach has two creases.
The creases run from the dimple to
the point.
The peach has a curved surface.
The skin covers the pulp.
The pulp is soft and juicy.
The juice is very sweet.
The pulp is good to eat.

Do you like the pulp?

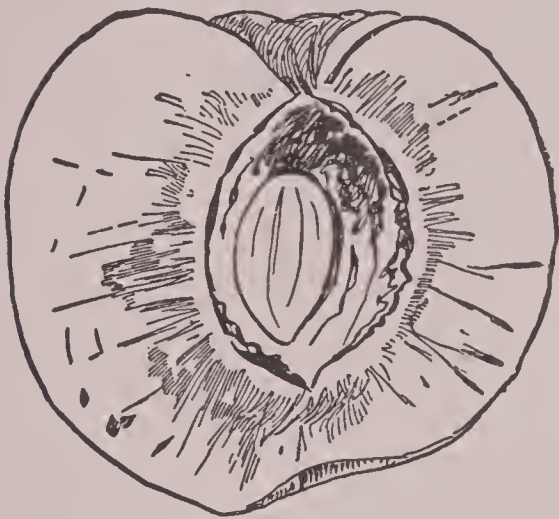
There are little fibers running through the pulp.

The fibers look like fine white threads.

The pulp is yellow.

There is a stone in the pulp.

The peach is a stone fruit.



The cherry is a stone fruit.

The plum is a stone fruit.

There are other stone fruits.

A stone fruit has its seed in a stone in the pulp.

Can you name other stone fruits?

The stone is the little house the seed lives in.

The peach stone has a point and a dimple.

The point is very sharp.

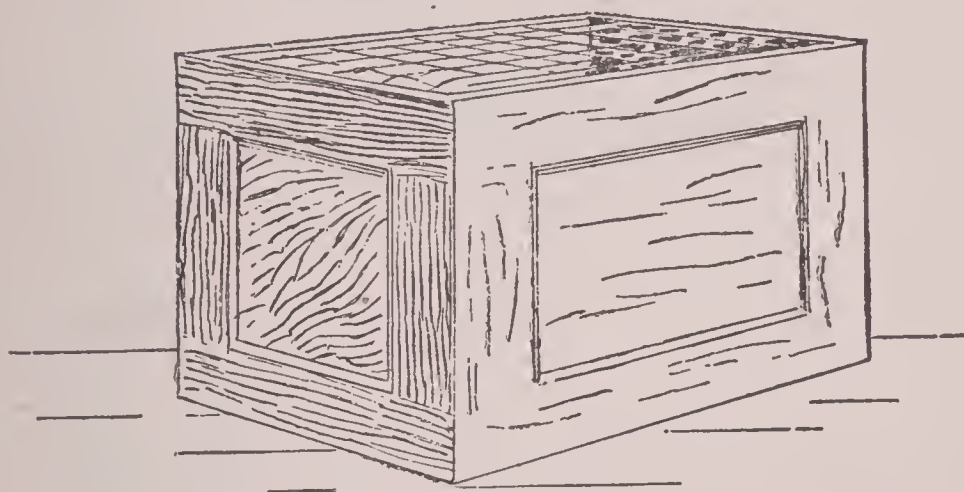
The surface of the peach stone is very rough.

Of what use is the stone?

It holds the little seed.

All stone fruits are called drupes.

THE COCOON.



I see a box.

Do you see the pretty box?

Yes, my red hat is in the black box.

The box has a surface.

The box has four corners on each side.

We will call the sides of the box faces.

How many faces has the box?

The box has six faces.

How many faces has the cube?

The cube has six faces, too.

Have you a box with six sides or faces?

The black box is larger than my box.

Ethel put some leaves in the box.

They were willow leaves.

The willow leaves are long and green.

Harold put something in the box, too.

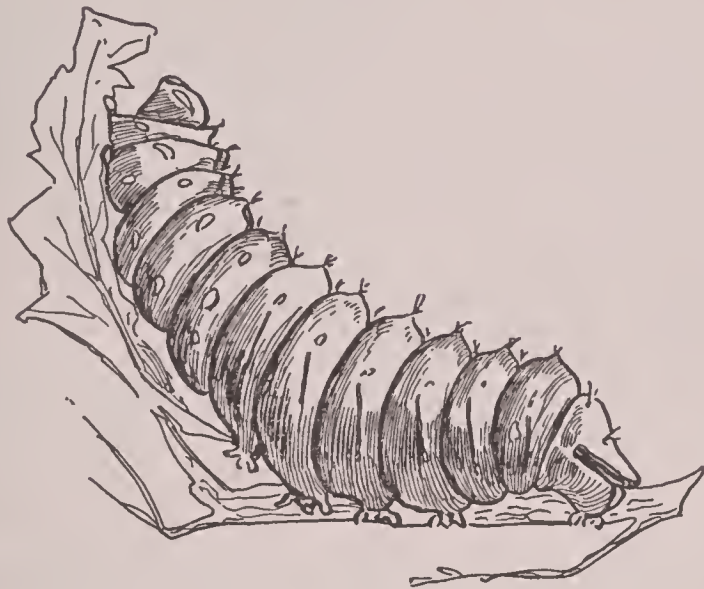
What did he put in the box?

Do you see the American silkworm?

Harold put the American silkworm in the box.

The American silkworm likes willow leaves.

AMERICAN SILKWORM.



I see an American silkworm.

The silkworm is green.

It likes willow leaves.

Mabel found the silkworm on the willow tree.

The willow tree grows near Mabel's home.

Mabel brought the silkworm to school.

We put the silkworm in a box and gave it some willow leaves to eat.

The silkworm likes willow leaves best.

It will not eat lilac leaves.

Did you watch the silkworm eat?

The silkworm has a head.

I saw the silkworm's eyes.

Can the silkworm see?

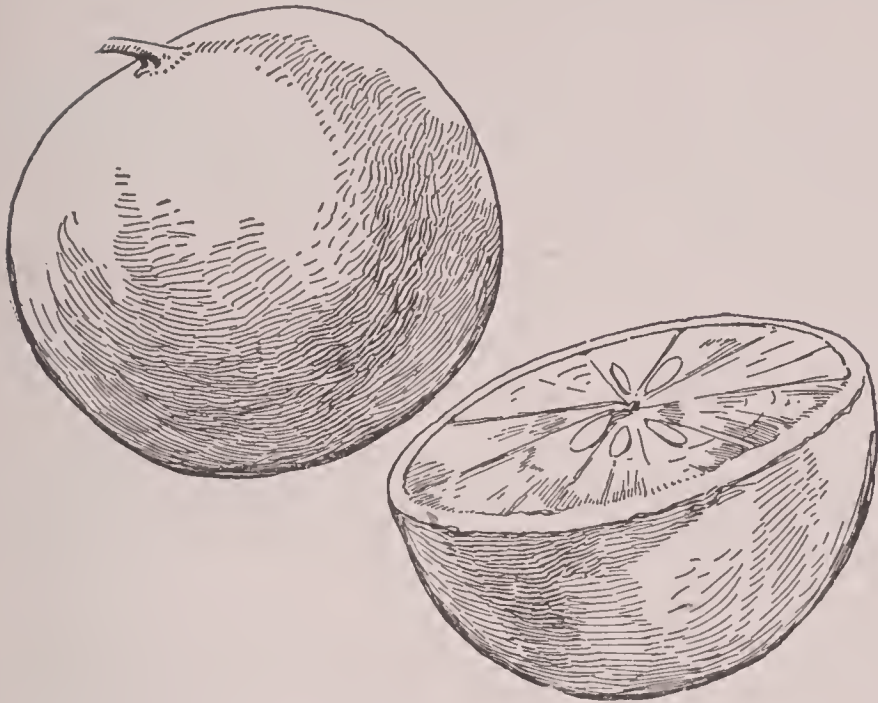
Yes, Clarence thinks the silkworm can see.

Martha, have you an American silkworm?

Yes, I am watching it spin its cocoon.

The silkworm makes a large cocoon.

THE ORANGE.



I see an orange.

Do you see the orange, Nellie?

Yes, I see the large orange.

The orange is spherical.

It can roll.

It is orange color.

Ann, do you see the large orange?

Yes, it is on the table.

Mabel brought the orange to school.

The orange has a curved surface.

The orange skin is very thick.

Do you see the little holes in the skin?

Yes, there is oil in those little holes.

John made the oil burn.

The inside of the orange skin is white.

Some orange skins are thicker than others.

Orange skin is not good to eat.

The pulp of the orange is good to eat.

I like the pulp.

The pulp of the orange is spherical, too.

The pulp has a curved surface.

There are creases on the outside of the pulp.

The pulp is juicy and sweet.

It is very soft.

There are fibers in the pulp.

The fibers look like thread.

The little fibers are white.

The pulp is yellow.

The pulp is divided into segments.

The segments look like the new moon.

Each segment has one curved and two plane surfaces.

The seeds are inside the segment.

The seeds are very small.

The seeds are white.

How many seeds did you find in your orange, Ned?

I found nine seeds in my orange.

Mary found seven seeds in hers.

The seeds are not good to eat.

They taste very bitter.

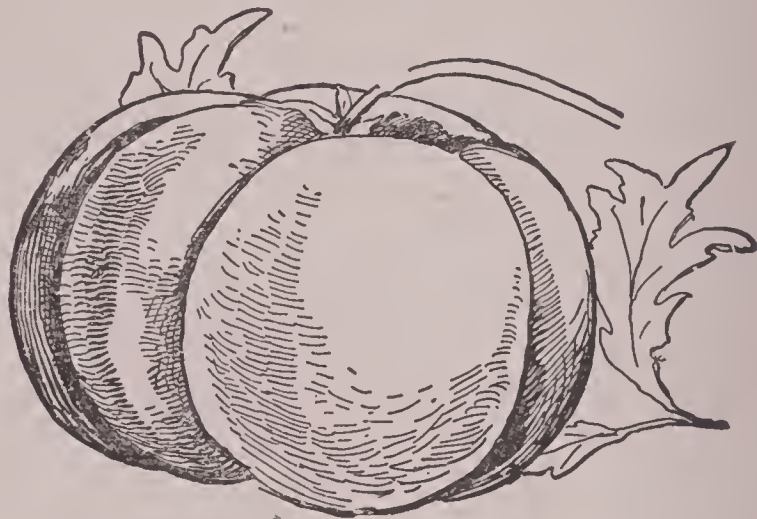
What shall we do with the seeds?

We will plant them, and see what they will do.

What do you think will happen to them, Harold?

We will watch and see.

THE TOMATO.



I see a tomato.

Have you a tomato?

Yes, I have a red tomato.

The tomato has a curved surface.

The surface of the tomato is very smooth.

The tomato has two dimples.

The stem dimple is larger than the blossom dimple.

Where are the creases?

The creases run from one dimple to the other.

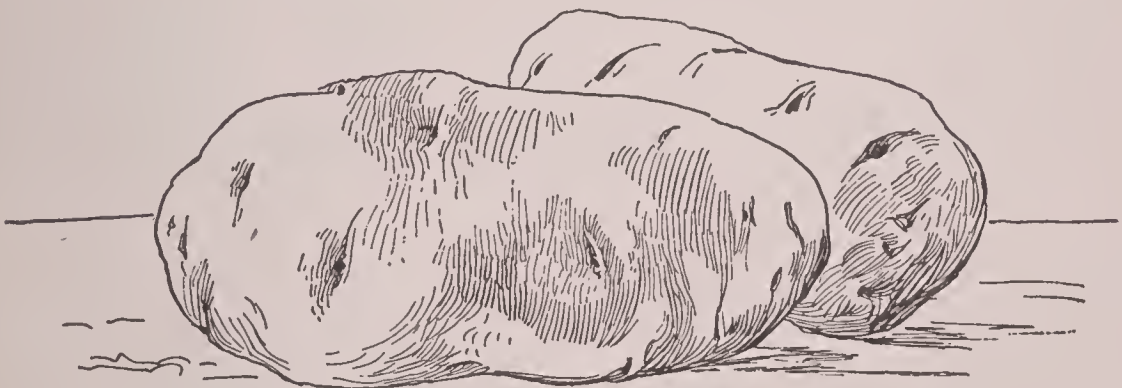
The tomato skin is very thin.

We can see the light through it.

The skin is translucent because we can see nothing but light through it.

The tomato skin is thin, smooth, red and translucent.

THE POTATO.



I have a potato.

The potato has a brown skin.

It is an old potato.

The skin is very thin.

The potato has a curved surface.

The potato has eyes.

Can the potato see?

No, the potato can not see.

Do you see the pulp?

The pulp is white.

The pulp is good to eat.

It is hard and juicy.

When the potato is cooked, the pulp is soft.

The potato grows under the ground.

THE BUSY BEE.

Bees are very busy workers.

They seem to work all the time.

Do you think a bee ever rests?

It is always working in the day time.

Do all of the bees work?

We will watch them and find out.
A bee's home is called a hive.

Bees live in their hives all winter.

When the spring comes, we can
hear the bees buzz.



Are you afraid of a bee?

A bee will not hurt you if you let
it alone.

But if you try to hurt a bee, it may
sting you. Let us be kind to the bees.

Of what use are bees?

Bees make honey. Do you like honey? How do bees make honey?

They find it in the pretty flowers.

Do all the flowers have honey in them?

No, but the bees know which have honey and which have not.

Have you seen them gather honey?

They gather it for food.

When they get a load of honey, they take it home.

They find out which way to go by rising with a circular flight into the air; then they fly very fast in a straight line to the doors of their own hives.

Did you ever hear any one speak of a "bee line"?

We take the honey from the hive which the bees have stored there for their own use.

THE EAGLE.



The eagle is a large, strong bird.

It has very large wings.

It can fly very high.

It builds its nest in the highest trees, or on the tops of the highest mountains.

The eagle's claws are very strong.

The eagle has been known to carry away rabbits and lambs in its claws.

The eagle has a very strong beak.
I never saw a bird with a stronger beak.

The eagle eats flesh. It tears rabbits and other small animals to pieces to feed the little eagles.

Would you like to have an eagle?
No, I think it would be very unhappy if it were kept in a cage.

THE COW.

See Fannie at the fence.

Fannie has come to see her Aunt Maggie.

Fannie has always lived in the city.

Aunt Maggie lives in the country.

Fannie likes to visit her Aunt Maggie.

She sees very strange things in the country.

She likes to play out in the grass.

One day she picked a big bunch of daises for Aunt Maggie.

Aunt Maggie likes daisies. She likes to have little Fannie with her.



What do you see on the other side of the fence?

I see a cow. Yes, this is a picture of Aunt Maggie's cow.

Do you think Fannie ever saw a cow before?

No, I do not think she did.

See how she looks at it.

Do you think she is afraid of it?

Yes, I think she is, but she likes to look at the cow.

If the cow comes too near her, I think she will run.

The cow has two horns and four feet.

The horns are sharp and round.

Will the cow hurt Fannie with its horns?

Do you see the cow's eyes?

The cow has very pretty eyes.

The cow looks as if it were good and kind.

Tell all you can about the cow.

Are the ears of the cow like the rabbit's ears?

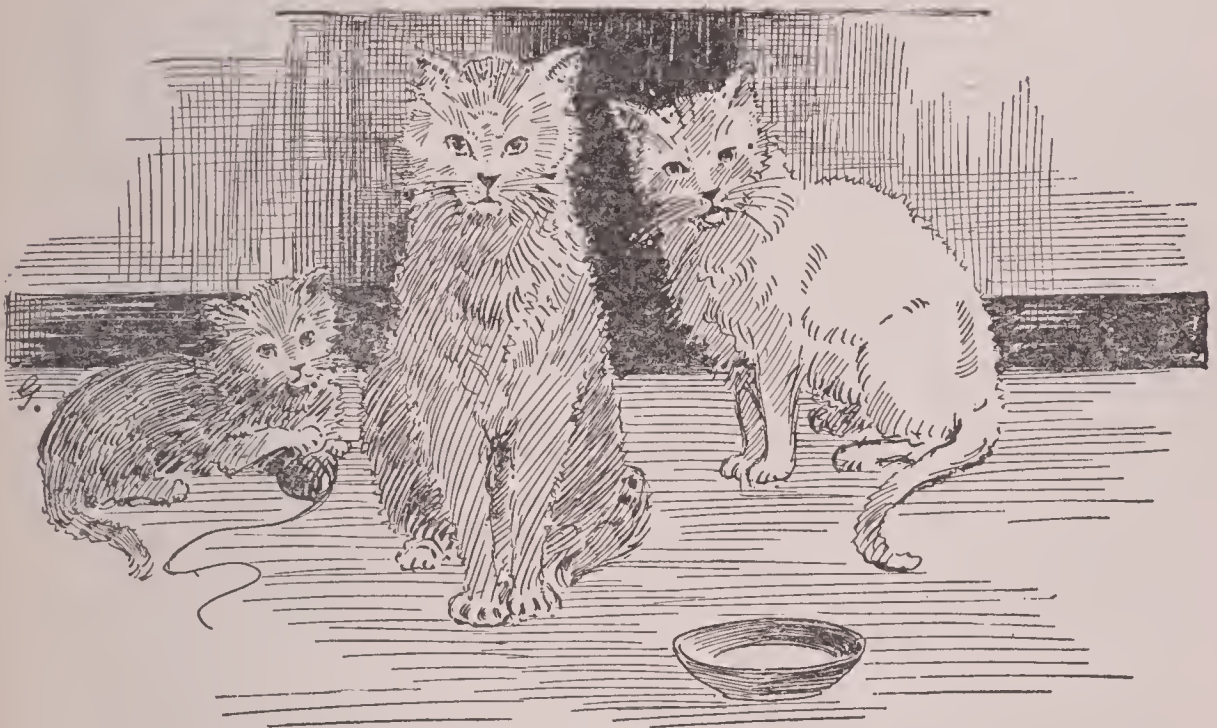
The cow is moving her mouth all the time.

Do you know why she moves her mouth in this way?

Of what use is the cow?

What name shall we give this cow?

THE CAT.



The cat is a very common animal.

Have you ever looked at a cat carefully?

Do you know why the cat's paws are so soft?

The cat can walk and run very softly.

How many toes has the cat on its front feet? Do you know how many it has on its hind feet?

Some cats seem to know a great many things.

Cats can hear, smell, and see very well.

THE GRASSHOPPER.

The grasshopper lives in the grass.

The grasshopper hops and flies.

Are grasshoppers good for anything?

The grasshopper has two pairs of wings.

The outside wings are thicker than the inside wings.

Of what use are the grasshopper's wings?

The grasshopper has three parts to its body.

The head, the thorax, and the abdomen are the parts of the body.



The head is triangular in shape.

Can you find the grasshopper's mouth?

Look at its lips. Tell something about them.

Did you watch the grasshopper eat?

The grasshopper has two large compound eyes.

There is a small eye under each compound eye.

Do you see another eye? Yes, there is one small eye in the middle of its face.

How many eyes has the grasshopper?

The grasshopper can see very well.
Let us be kind to the grasshopper.

THE BIRD'S STORY.

See these two little birds! What bright eyes they have!

They are talking to each other. Do you know what they are saying? If we could understand bird language we might know. I think they

are two young birds. They have not been out of their nest many times. I think they are tired and want to go home.

Edith and Sadie watched them for a long time.



At last Edith said, "I wonder if they can fly?"

"Why yes," said Sadie, "don't you see their wings?"

Edith thinks they are not strong enough to fly far.

They are resting now. Soon they will fly back to their nest.

By and by they will be big, strong birds.

The next time they fly away I think they will not go so far from the nest.

WHO CARES FOR THE BIRDS?

God cares for the birds. In the summer time the birds can gather food very easily.

They eat fruits and small insects.

In the winter time some birds go where it is warmer. Some birds are with us all winter.

Where do they get their food in the winter time?

God makes good little girls and boys think of the birds.



Did you ever think of the birds in the winter, and put food out on the snow for them?

Would the birds live if somebody did not put food out on the snow for them?

You can teach the birds that live near you to watch for food.

If you put food in the same place every morning, the birds will come there for it.

Here is a picture of a kind little boy. He is sharing his food with the birds.

What kind of a bird is this in the picture?

It is not afraid of the boy.

The birds know when little boys and girls are kind to them.

Let us think of the birds when the snow is on the ground.

We must think of them at other times, too.

THE WIND.



The wind talks very loudly this morning.

I do not like to hear it make so much noise. From what place does the wind come?

I have never seen it.

I have looked and looked, but I can not find it.

I can see what it does.

The wind blew my hat off. The hat rolled away, but I could not see the wind.

The wind made John's kite fly.

Paper and leaves move in the direction in which the wind blows. It is strange we can not see the wind since it makes so much noise.

SEPTEMBER.



We are glad to come back to school.

Do you see the picture of our new schoolhouse?

We are proud of our schoolhouse.

We will try to do our very best in every way this year.

What can you say of the month of September?

May has a bunch of golden-rod.

Grandpa is picking his peaches.

The bees are gathering honey.

They are getting ready for winter.

How brown the grass is!

The maple-leaves have put on their red dresses.

The snowbirds are coming to spend the winter.

Dick found a caterpillar under the oak tree.

We put it in a box and fed it with oak-leaves.

We see grasshoppers.

Pumpkins are ripe.
Hear the tree toads call for rain.

AUTUMN.



It is Autumn now. The wheat is getting ripe. All fruit that is not ripe is ripening now.

Do you like the Autumn? May thinks it is a sad time. Why, do you know?

It is sad to see the leaves fall from the trees and to see the grass turn yellow.

Yes, but the leaves are very pretty now.

Listen to the wind. It is talking to the leaves. They are going to play with the wind. When they get tired playing, they will go to sleep.

The snow will come soon to cover them and keep them warm.

THANKSGIVING.

This is Thanksgiving time. The birds are thanking God, too. The little birds are always thankful. They seem to be happy at all times.

Hear them sing! It seems that

all that music could not be made by birds.

Each bird tries to do his best.

How pretty the little birds are!



They help to make this world happier.

We will miss them when they go away this winter.

Where do they go? They go where it is warmer. We must treat them well while they are here, so

they will come back again. What can we do to help them? We can give them food every day. What kind of food shall we give them? Watch the little birds and they will tell you.

Try them with crumbs. Feed them every morning.

THE SNOW.



Oh! See the snow!

Where did the snow come from?

It is all over the ground.

I think the snow fell from the sky,
Mary.

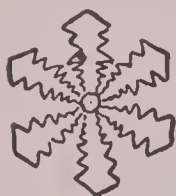
Oh, yes! See the clouds!

The clouds look like white sheep.

The snow is whiter than sheep's
wool, Ned.

Yes, but when the snow is up in
the sky it looks whiter than it does
here. Can you think of anything as
white as the snow?

The snow is very white and soft.



I call my kitty
Snow-White, be-
cause her fur is so
soft and white.

Her fur is not so
white as snow.

WHAT ANN SAW.

Charlie is very kind to his sister Ann.

He takes her to school every morning, and waits for her at night.

In the winter time he lets her ride on his sled.

Ann fell from the sled one morning, when Charlie was running.

She did not get hurt.

When Charlie saw that she had fallen, he went to help her on the sled again. Ann's black shawl was covered with snow.

Ann said, "Do look, Charlie, see the pretty stars!"

Did you ever put a snowflake on something black and look at it? Try it some day.

THE FROST.



Did you see what Jack Frost did last night?

Come and look at the window.

Oh! See the funny things!

I see a tree. One, two, three, four, five trees!

See the fence! It will fall down.

I see a Fairy. The Fairy is near a little lake.

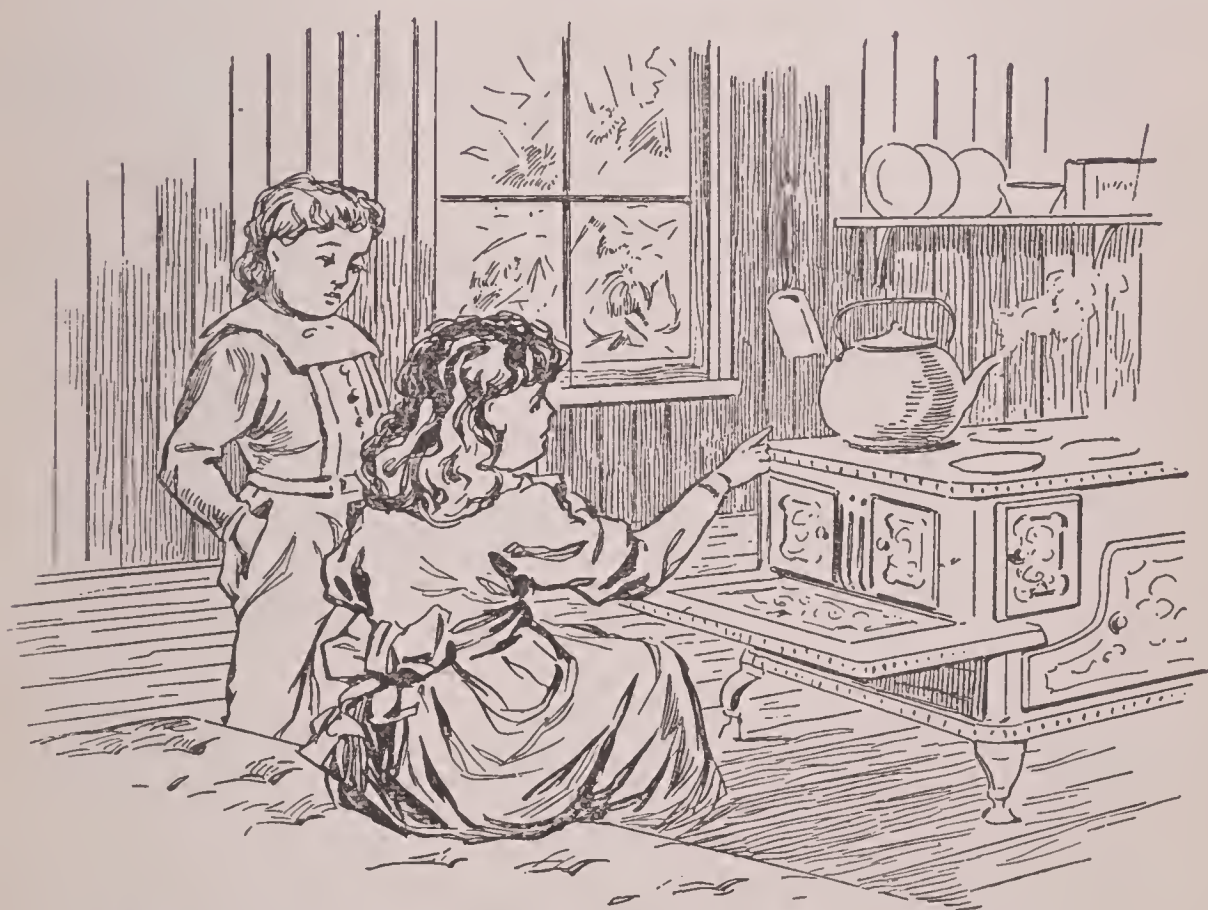
How did Jack Frost make the pictures, Mamma?

May I watch him work tonight?

No, but you may watch Jack Frost work today.

He works all day during cold weather.

MABEL AND FRED AT WORK.



What are you doing, children?

We are helping Jack Frost.

Mamma said we might help him.

How are you helping him?

Don't you see? Fred made a fire and put some water on the stove in this teakettle.

When the water boils, we will let the steam from the teakettle go on the window pane.

What makes the steam come from the teakettle?

When the steam gets on the glass, Jack Frost makes pictures with it.

Does Jack Frost make pictures in the summer time?

THE STORY JACK FROST TOLD.

Mamma, see what we have done!

Why, Mabel, what is this?

Fred and I have been helping Jack Frost.

How did you help him?

We made the fire that boiled the water, that made the steam, that Jack Frost worked with.



Well, that sounds like a story I once heard.

What story, Mamma? Do tell us a story.

The story you made me think of was, "The House That Jack Built."

Who? Jack Frost?

Please tell us a story of Jack Frost.

Well, let us look at the window and see what he is doing.

He is telling you a story, himself.

He talks very softly. You must watch and think while he talks.

Many little fairies are talking to us, if we but watch and listen.

Jack Frost says, "It is colder out here than where you are." Jack Frost likes the cold.

See the pretty story he is painting!

I see an Indian's wigwam and two Indians.

See the trees! There is a road. I see a little lake, too.

I think that the Indians have been fishing.

I wish that all the little boys and girls would look for Jack Frost's stories.

Can you see Jack Frost as he makes the frost pictures? He creeps, like a little fairy, over the window panes.

The wind, rain, and hail make much noise, but Jack Frost works very quietly. Although Jack Frost does not make any noise while he works, he is always very busy.

Did you ever see the moon shining on the windows after Jack Frost had painted them? The moon's light makes Jack Frost's pictures look very pretty. It makes them shine and sparkle like silver and diamonds.

When the sun shines on Jack Frost's window pictures it makes them look

pretty, too. Sometimes the sunshine spoils Jack Frost's pictures. How does it spoil them?

Watch the windows, some day when the sun is shining on them, and you will see for yourself.

JACK FROST'S LITTLE SISTER.

This morning, when all the rest had
gone down,

I stood by the window to see
The beautiful pictures, which there, in
the night,

Jack Frost had been making for me.
There were mountains, and windmills,
and bridges, and boats,

Some queer little houses and trees,
A hammock that swung by itself in
the air,

And a giant cut off at the knees.

Then there was a steeple so crooked
and high,

I was thinking it surely must fall,
When right down below it I happened
to spy,

The loveliest thing of them all.
The cutest and cunningest dear little
girl,—

I looked at her hard as I could;
And she stood there so dainty and
looked back at me,

In a little white ulster and hood.
“Good morning,” I whispered, for all
in a flash

I knew 'twas Jack Frost's little
sister,

I was so glad to have her come visit-
ing me,

I reached up quite softly and kissed her.
There! can you believe it? The dar-
ling was gone,

Killed dead in that one little minute!
I never once dreamt that a kiss would
do that,

Nor could there be any harm in it.
But I am so sorry! For though I have
looked

Fifty times at the window since then,
Half hoping to see her once more, yet
I know

She never can come back again.
And it may be foolish, but all through
the day

I have felt—and I knew that I should,
Just as if I had killed her, that dear
baby girl,

In a little white ulster and hood.

— CARRIE BRONSON, in *Youth's Companion*.

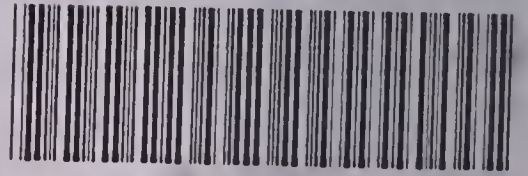
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